TURBOBOOST Mk2
SHOWER PUMPS

1.5 bar and 2.0 bar

Twin and single ended pumps designed specifically for gravity feed or stored water systems where the hot

Installation Manual

Please retain for future reference
February 2018
Issue 4

Patented Product
GB2506280B
GB2465392B

INSTALLATION INSTRUCTIONS AND SAFETY INFORMATION

PLEASE FOLLOW THESE INSTALLATION INSTRUCTIONS CAREFULLY. FAILURE TO INSTALL YOUR PUMP IN ACCORDANCE WITH THESE INSTRUCTIONS WILL INVALIDATE YOUR WARRANTY.

- **NEVER FIT THE PUMP DIRECTLY TO THE COLD MAINS**
- **THE STORED HOT WATER TEMPERATURE MUST NOT EXCEED 60°C.**
- **ENSURE THAT THE HOT SUPPLY TO THE PUMP IS VIA AN APPROVED METHOD (SEE POINT 8 ON THIS PAGE).**
- **JOINTING COMPOUNDS, BOSS WHITE, HEMP AND STEEL WOOL, MUST NOT BE USED. SOLDER FLUXES MUST NOT COME INTO CONTACT WITH THE PUMP.**

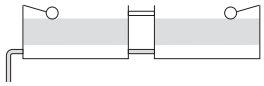
It is essential to make sure that:

1 The cold stored water capacity is adequate for ALL THE HOUSEHOLD REQUIREMENTS. (Minimum 50 gallons per bathroom, 80 gallons for one (1) bathroom plus an en suite shower room).

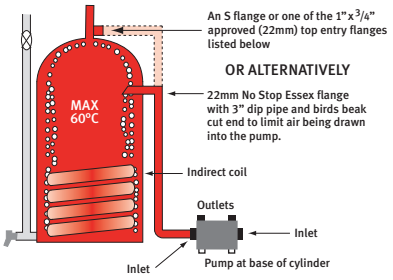
2 The cold supplies to the hot water cylinder and to the pump are taken from the opposite side of the cold tank to the cold mains inlet. The bottom of the cold tank MUST ALSO be checked and cleared of debris.

3 In systems where there are two (2) or more bathrooms, the cold supply to the cylinder MUST BE in 28mm pipework.

4 Multiple cold water storage (CWS) tanks must be linked top and bottom in 28mm pipework and fitted with float operated valves in all tanks, or linked to comply with the Water Supply and Fittings Regulations (1999).



5 NEVER put a non return valve; inverted loop; restrictive balofix or an air vent on the supply pipework to a pump.



▲ **FIGURE 1**

6 The best possible position for the pump is at or near the base of the hot water cylinder at least 600mm below the bottom of the cold water storage tank.

7 The area around the pump MUST BE sufficient to allow air flow for cooling of the motor.

8 The hot water connection from the cylinder MUST BE either;

- **A 3/4" NO STOP ESSEX FLANGE**
- **An S FLANGE**
- **A YORK FLANGE (may only be used in systems where the hot water requirement is less than 20l/min)**
- **A WARIX FLANGE as long as the following criteria is met;**

i. The vent connection must be from the side.

ii. The supply connection to the pump MUST BE FROM THE TOP of the Warix flange via a 22mm compression elbow to avoid inverted loops.

9 The hot supply pipework to the pump is a maximum of 5 metres in 22mm (HOT AND COLD SUPPLIES NOT MORE THAN 2 metres in 15mm).

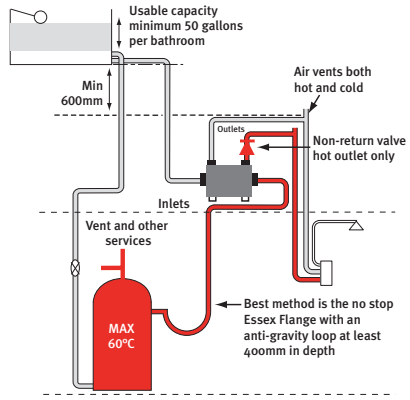
10 This pump is shower specific.

11 Inlets are horizontal, outlets are vertical.

For pumps positioned above the hot outlet on the hot water cylinder

An anti-gravity loop (AGL)of at least 400mm (ideally using swept bends) must be used when the pump is sited above the dome of the hot water cylinder as it prevents air tracking up into the pump chamber and back siphoning of the water again, creating air in the pump chamber.

An approved side or top entry flange must be used in these circumstances for the hot water connection to the cylinder, with the Essex or alternative side entry flange being the recommended method of connection. If the pump experiences aeration or low pressure as a result of poor flow to the pump with the use of a top entry flange, a side entry or Essex Flange may become a requirement.



▲ **FIGURE 2**

All up and over pipework must be vented at the highest point on the outlet of the pump, and a non-return valve (NRV) fitted to the hot outlet only. LOFT MOUNTED PUMPS MUST BE PROTECTED AGAINST FROST DAMAGE.

In positive head systems, allow for increased resistance of long pipe runs with multiple bends. The natural flow from the shower head or other outlets MUST be at least 1ltr in 30 sec per side or 2ltr in 30 sec mixed to activate the pump.

Plumbing

The installation must comply with the relevant requirements or local bye-laws.

The pump MUST be mounted upright (shaft horizontal – not screwed down). Pump must be adequately vented, protected from frost, with access provided for servicing.

Jointing compounds, Boss White, Hemp and Steel Wool, MUST NOT BE USED. SOLDER FLUXES MUST NOT COME INTO CONTACT WITH THE PUMP (THIS WILL INVALIDATE YOUR WARRANTY).

All associated pipework MUST be thoroughly flushed before making final connections to the pump. Fill the pump with water before connecting to the discharge pipework.

MAXIMUM STATIC HEAD – 10 METRES.

In ALL pump systems it is essential to ensure that the hot and cold stored water capacity is sufficient
to meet the household requirements.

The Plumbing installation must comply with "The Water Supply (Water Fittings) Regulations 1999", BS6700, and building regulations.

Electrical

The electrical installation must be carried out in accordance with the current national electrical regulations (BS 7671:2008, Building (Scotland) Act 2003, or Building Regulations (Northern Ireland) 2000). This pump must be installed by a competent person, and must be fitted via a fused mains spur. The fuse must be rated at 3A. Higher rated fuses MUST NOT be used.

If the supply cord is damaged, it must be replaced by the manufacturer, it's service agent, or similarly qualified person in order to avoid a hazard.

All pipework must be cross-bonded in accordance with IET regulations.

The motor shell will become hot during pump operation. DO NOT allow the mains supply cable to come into contact with it or any other hot surfaces (e.g. the pump or pipework). To ensure this, the cable must be safely routed and securely fastened with cable clips.

Cooling and ventilation

The pump should be placed in a position where there is an adequate air flow to cool the motor and separated from any other appliances that generate heat. It should be installed in a clear space allowing 100mm additional space at each side, end and top of the pump.

Safety in Operation

These appliances are not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

TECHNICAL DATA

Product specification

- 150 KPa (1.5 bar) Max – 140 KPa (1.4 bar) @ 8 litres/min – 100 KPa (1.0 bar) @ 16 litres/min
- 200 KPa (2.0 bar) Max – 180 KPa (1.8 bar) @ 8 litres/min – 120 KPa (1.2 bar) @ 16 litres/min
- Supply voltage 230V 50Hz
- Motor speed - 5,000 – 8,000 rpm
- Operational current draw 1.6 – 1.8 amps
- 414W – 460W input power
- Pack size 28 x 16 x 18cm
- Weight – approx. 2.6 Kg with hoses
- IPX3 ingress protection rating
- Continuous rating at 8 litres per minute combined

Salamander Pumps operates a policy of continuous development and reserves the right to change any of the specifications of its products without prior notice. All information, data, and illustrations given in this leaflet may be subject to variation.

OPERATING INSTRUCTIONS

Before you finish

Commissioning

- First flush inlet pipework and carefully fill pump with water
- Connect discharge pipework
- Check that any pump isolating valves are open
- Fill system. Check for leaks
- DO NOT RUN PUMP DRY – to do so will cause irreparable damage to your pump and will **invalidate your warranty**
- Open shower mixer valve/system outlets to maximum hot and cold to check the natural flow (unpumped) flow of at least 1 litre per minute – positive head systems.

It is CRITICAL to discharge water through the pump into a container before connecting the pump to outlet pipework in order to ensure the air has been discharged from inlet pipework and pump chambers. This will not happen if the outlet pipework is connected to the pump.

DISPOSAL INSTRUCTIONS

Your appliance contains valuable materials which could be recovered or recycled. At the end of the products useful life please dispose of it at an appropriate civic waste collection point.

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